

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): AA yellow ink for inkjet recording, which

comprises:

an aqueous medium; and

at least two dyes, wherein the at least two dyes each independently has: a λ_{max} of from 390 nm to 470 nm; a ratio of $I(\lambda_{\text{max}} + 70 \text{ nm})$ to $I(\lambda_{\text{max}})$ of 0.4 or less, wherein $I(\lambda_{\text{max}} + 70 \text{ nm})$ represents an absorbance at a wavelength of $\lambda_{\text{max}} + 70 \text{ nm}$ and $I(\lambda_{\text{max}})$ represents an absorbance at a wavelength of λ_{max} ; and an oxidation potential higher than 1.0 V versus SCE, and

wherein at least one of the at least two dyes is a dye represented by formula (Y1):

$(A_{11}-N=N-B_{11})_n-L$

wherein

A_{11} and B_{11} each independently represents a heterocyclic group that may be substituted; n is 1 or 2; and L represents a hydrogen atom, a monovalent substituent, a single bond, or a divalent linking group,

provided that when n is 1, L is a hydrogen atom or a monovalent substituent, and A_{11} and B_{11} are both monovalent heterocyclic groups; and when n is 2, L is a single bond or a divalent linking group, A_{11} is a monovalent heterocyclic group, and B_{11} is a divalent heterocyclic group; and wherein at least one of the at least two dyes is a dye represented by formulae (Y2) or (Y3):

(Y2) P-N=N-Q

wherein, P represents an aryl group that maybe substituted; and Q represents a heterocyclic group that may be substituted.

(Y3) X-N=N-Y

wherein, X and Y each represents an aryl group that may be substituted.

2. (canceled).

3. (previously presented): The yellow ink for inkjet recording according to claim 1, wherein a content of the dye represented by formula (Y1) is 50 % or more by weight with respect to total amount of all dyes in the yellow ink.

4. (original): A black ink for inkjet recording, which comprises:

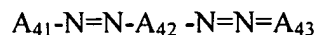
an aqueous medium; and

at least two dyes, wherein the at least two dyes each independently has : a λ_{\max} of from 500 nm to 700 nm; and a half-value width of 100 nm or more in an absorption spectrum of a diluted solution, the absorption spectrum being standardized to have an absorbance of 1.0 at the λ_{\max} ,

wherein at least one of the at least two dyes has an oxidation potential higher than 1.0 V versus SCE.

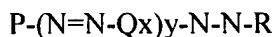
5. (original): The black ink for inkjet recording according to claim 4, which further comprises a dye having a λ_{\max} of from 350 nm to 500 nm.

6. (previously presented): The black ink for inkjet recording according to claim 4, wherein at least one dye is a compound represented formula (B1) :



wherein A_{41} , A_{42} and A_{43} each independently represents an aromatic group or a heterocyclic group that may be substituted; A_{41} and A_{43} are monovalent groups; and A_{42} is a divalent group.

7. (previously presented): The black ink for inkjet recording according to claim 4, wherein at least one dye is a compound represented by formula (B2):



wherein P, Q and R each represent an aromatic group that may be substituted; x is an integer of 1 or more; and y is an integer of 0 or more.

8. (original): The black ink for inkjet recording according to claim 7, wherein Q in formula (B2) is a polycyclic aromatic ring.

9. (currently amended): The black ink for inkjet recording according to claim 5, wherein the dye having the λ_{\max} of from 350 nm to 500 nm ~~according to claim 6 is the a~~ compound represented by formula (B1):



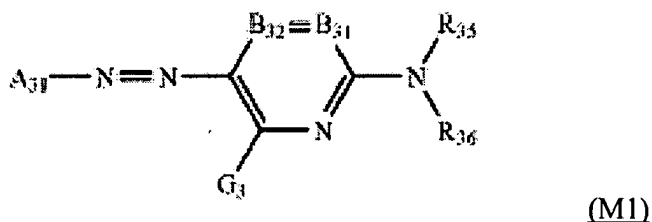
wherein A_{41} , A_{42} and A_{43} each independently represents an aromatic group or a heterocyclic group that may be substituted; A_{41} and A_{43} are monovalent groups; and A_{42} is a divalent group.

10. (currently amended): A magenta ink for inkjet recording, which comprises: a first dye; and a second dye having a different structure from the first dye, the first dye and the second dye each independently having an oxidation potential higher than 1.0 V versus SCE,

wherein the first dye is an azo dye comprising an azo group, each end of the azo group having a hetero ring; and the second dye is an anthrapyridone dye.

11. (canceled).

12. (currently amended): The magenta ink for inkjet recording according to claim 10, wherein the azo dye is a compound represented by formula (M1) :



wherein

A₃₁ represents a 5-membered heterocyclic ring;

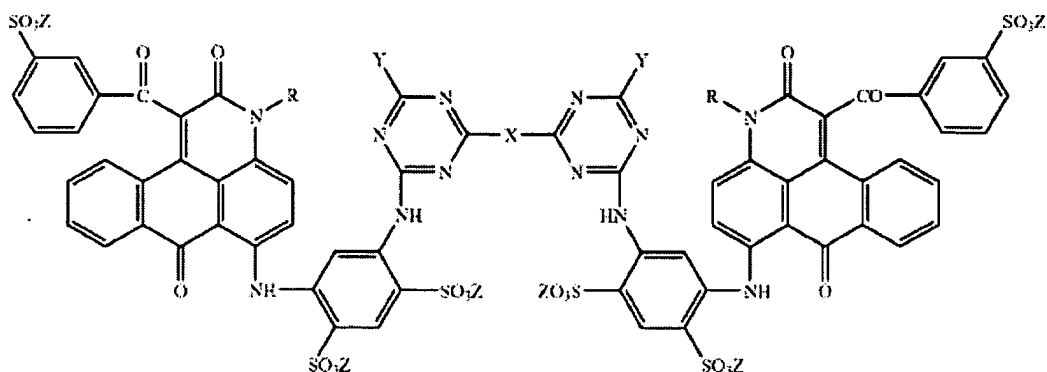
B₃₁ and B₃₂ each represents =CR₃₁- or -CR₃₂=, or either one of B₃₁ and B₃₂ represents a nitrogen atom while the other one represents =CR₃₁- or -CR₃₂=;

R₃₅ and R₃₆ each independently represents a hydrogen atom, an aliphatic group, an aromatic group, a heterocyclic group, an acyl group, an alkoxycarbonyl group, an aryloxy carbonyl group, a carbamoyl group, an alkylsulfonyl group, an arylsulfonyl group,

G₃, R₃₁ and R₃₂ each independently represents a hydrogen atom, a halogen atom, an aliphatic group, an aromatic group, a heterocyclic group, a cyano group, a carboxyl group, a carbamoyl group, an alkoxycarbonyl group, an aryloxy carbonyl group, a heterocyclic oxy carbonyl group, an acyl group, a hydroxy group, an alkoxy group, an aryloxy group, a heterocyclic oxy group, a silyloxy group, an acyloxy group, a carbamoyloxy group, an alkoxycarbonyloxy group, an aryloxy carbonyloxy group, an amino group, an arylamino group, a heterocyclic amino group, an acylamino group, an ureido group, a sulfamoylamino group, an alkoxycarbonylamino group, an aryloxy carbonylamino group, an alkylsulfonylamino group, an arylsulfonylamino group, a heterocyclic sulfonylamino group, a nitro group, an alkylthio group, an arylthio group, an alkylsulfonyl group, an arylsulfonyl group, a heterocyclic sulfonyl group, an alkylsulfinyl group, an aryl sulfinyl group, a heterocyclic sulfinyl group, a sulfamoyl group, a sulfo group or a heterocyclic thio group, each of which may be further substituted; and

R₃₁ and R₃₅, or R₃₅ and R₃₆ may be bonded to form a 5- or 6-membered ring.

13. (currently amended): The magenta ink for inkjet recording according to claim ~~10~~10, wherein the anthrapyridone dye is a compound represented by formula (M2) :



(M2)

wherein

R represents a hydrogen atom, an alkyl group, a hydroxy-lower alkyl group, a cyclohexyl group, a mono or dialkylaminoalkyl group, or a cyano-lower alkyl group;

Y represents: a chlorine atom; a hydroxyl group; an amino group; a mono or dialkylamino group in which the alkyl moiety may have a substituent selected from the group consisting of a sulfonic acid group, a carboxyl group and a hydroxyl group; an aralkylamino group; a cycloalkylamino group; an alkoxy group; a phenoxy group in which the benzene ring may have a substituent selected from the group consisting of a sulfonic acid group, a carboxyl group, an acetyl amino group, an amino group and a hydroxyl group; an anilino group that may have one or two substituents selected from the group consisting of a sulfonic acid group and a carboxyl group; a naphthylamino group in which the naphthyl group may be substituted with a sulfonic acid group; or a mono or dialkylaminoalkylamino group;

X represents a crosslinking group; and

Z represents a hydrogen atom, an alkali metal element, an alkaline earth metal element, an alkylamino group, an alkanolamino group, or an ammonium group.

14. (currently amended): An ink set for inkjet recording, which comprises at least one of:

a yellow ink, comprising:

an aqueous medium; and

at least two dyes, wherein the at least two dyes each independently has: a λ_{max} of from 390 nm to 470 nm; a ratio of $I(\lambda_{\text{max}} + 70 \text{ nm})$ to $I(\lambda_{\text{max}})$ of 0.4 or less, wherein $I(\lambda_{\text{max}} + 70 \text{ nm})$ represents an absorbance at a wavelength of $\lambda_{\text{max}} + 70 \text{ nm}$ and $I(\lambda_{\text{max}})$ represents an absorbance at a wavelength of λ_{max} ; and an oxidation potential higher than 1.0 V versus SCE,

wherein at least one of the at least two dyes is a dye represented by formula (Y1):



wherein

A_{11} and B_{11} each independently represents a heterocyclic group that may be substituted; n is 1 or 2; and L represents a hydrogen atom, a monovalent substituent, a single bond, or a divalent linking group, provided that when n is 1, L is a hydrogen atom or a monovalent substituent, and A_{11} and B_{11} are both monovalent heterocyclic groups; and when n is 2, L is a single bond, or a divalent linking group, A_{11} is a monovalent heterocyclic group, and B_{11} is a divalent heterocyclic group; according to claim 1;

a black ink, comprising:

an aqueous medium; and

at least two dyes, wherein the at least two dyes each independently has : a λ_{max} of from 500 nm to 700 nm; and a half-value width of 100 nm or more in an absorption

spectrum of a diluted solution, the absorption spectrum being standardized to have an absorbance of 1.0 at the λ_{max} ,

wherein at least one of the at least two dyes has an oxidation potential higher than 1.0 V versus SCE;~~according to claim 4,~~ and

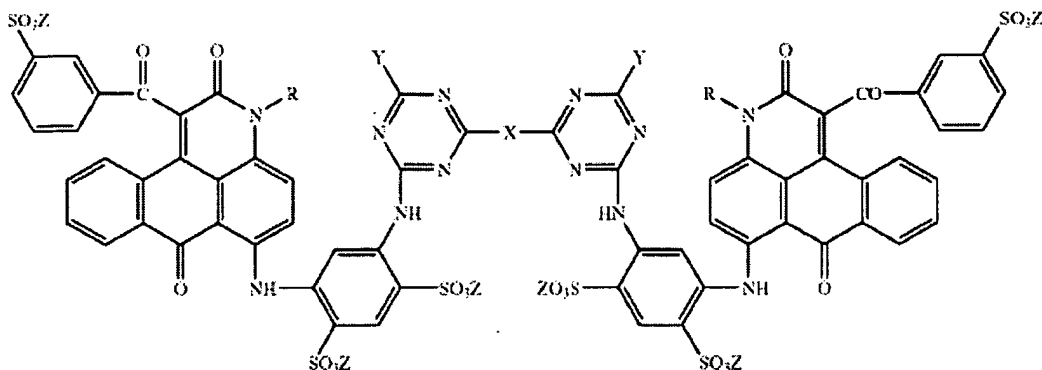
a magenta ink, comprising:

a first dye; and a second dye having a different structure from the first dye, the first dye and the second dye each independently having an oxidation potential higher than 1.0 V versus SCE,

wherein the first dye is an azo dye comprising an azo group, each end of the azo group having a hetero ring~~according to claim 10.~~

15. (currently amended): An ink set for inkjet recording, which comprises at least two magenta inks each independently comprising a dye having an oxidation potential higher than 1.0 V versus SCE,

wherein at least one of the at least two magenta inks comprises a dye represented by formula (M2):



(M2)

wherein,

R represents a hydrogen atom, an alkyl group, a hydroxy-lower alkyl group, a cyclohexyl group, a mono or dialkylaminoalkyl group, or a cyano-lower alkyl group;

Y represents a chlorine atom; a hydroxyl group; an amino group; a mono or dialkylamino group in which the alkyl moiety may have a substituent selected from the group consisting of a sulfonic acid group, a carboxyl group and a hydroxyl group; an aralkylamino group; a cycloalkylamino group; an alkoxy group; a phenoxy group in which the benzene ring may have a substituent selected from the group consisting of a sulfonic acid group, a carboxyl group, an acetylamino group, an amino group and a hydroxyl group; an anilino group that may have one or two substituents selected from the group consisting of a sulfonic acid group and a carboxyl group; a naphthylamino group in which the naphthyl group may be substituted with a sulfonic acid group; or a mono or dialkylaminoalkylamino group;

X represents a crosslinking group; and

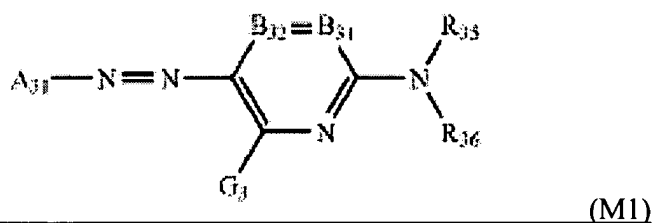
Z represents a hydrogen atom, an alkali metal element, an alkaline earth metal element, an alkylamino group, an alkanolamino group, or an ammonium group; wherein

one magenta ink comprises an azo dye comprising: an azo group; and hetero rings bonding to both ends of the azo group, and

the other magenta ink comprises a dye having a structure other than the azo dye.

16. (canceled).

17. (currently amended): The ink set for inkjet recording according to claim 15, wherein at least one of the at least two magenta inks comprises a dye represented by formula (M1):



wherein,

A₃₁ represents a 5-membered heterocyclic ring;

B₃₁ and B₃₂ each represents =CR₃₁- or -CR₃₂=, or either one of B₃₁ and B₃₂ represents a nitrogen atom while the other one represents =CR₃₁- or -CR₃₂=;

R₃₅ and R₃₆ each independently represents a hydrogen atom, an aliphatic group, an aromatic group, a heterocyclic group, an acyl group, an alkoxycarbonyl group, an aryloxy carbonyl group, a carbamoyl group, an alkylsulfonyl group, an arylsulfonyl group,

G₃, R₃₁ and R₃₂ each independently represents a hydrogen atom, a halogen atom, an aliphatic group, an aromatic group, heterocyclic group, a cyano group, a carboxyl group, a carbamoyl group, an alkoxycarbonyl group, an aryloxy carbonyl group, a heterocyclic oxycarbonyl group, an acyl group, a hydroxy group, an alkoxy group, an aryloxy group, a

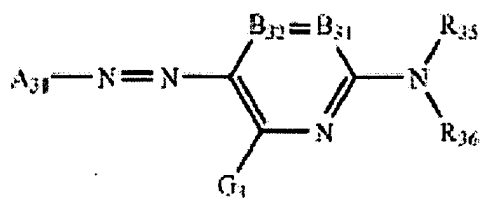
heterocyclic oxy group, a silyloxy group, an acyloxy group, a carbamoyloxy group, an alkoxycarbonyloxy group, an aryloxy carbonyloxy group, an amino group, an arylamino group, a heterocyclic amino group, an acylamino group, an ureido group, a sulfamoylamino group, an alkoxycarbonylamino group, an aryloxy carbonylamino group, an alkylsulfonylamino group, an arylsulfonylamino group, a heterocyclic sulfonylamino group, a nitro group, an alkylthio group, an arylthio group, an alkylsulfonyl group, an arylsulfonyl group, a heterocyclic sulfonyl group, an alkylsulfinyl group, an aryl sulfinyl group, a heterocyclic sulfinyl group, a sulfamoyl group, a sulfo group or a heterocyclic thio group, each of which may be further substituted; and

R₃₁ and R₃₅, or R₃₅ and R₃₆ may be bonded to form a 5- or 6-membered ring
according to claim 12.

18. (canceled).

19. (currently amended): ~~The~~ An ink set for inkjet recording which comprises at least two magenta inks each independently comprising a dye having an oxidation potential higher than 1.0 V versus SCE, wherein one magenta ink comprises an azo dye comprising: an azo group; and hetero rings bonding to both ends of the azo group, and

the other magenta ink comprises a dye having a structure other than the azo dye, and
~~according to claim 15,~~ wherein at least one of the at least two magenta inks comprises: a dye represented by formula (M1):



(M1)

wherein,

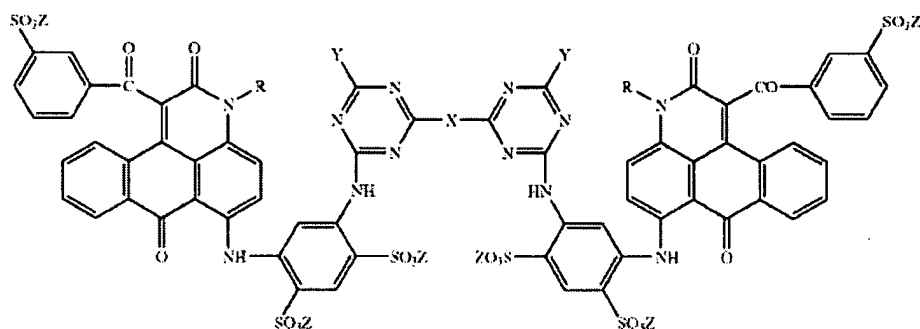
A_{31} represents a 5-membered heterocyclic ring;

B_{31} and B_{32} each represents $=CR_{31}-$ or $-CR_{32}=$, or either one of B_{31} and B_{32} represents a nitrogen atom while the other one represents $=CR_{31}-$ or $-CR_{32}=$;

R_{35} and R_{36} each independently represents a hydrogen atom, an aliphatic group, an aromatic group, a heterocyclic group, an acyl group, an alkoxycarbonyl group, an aryloxycarbonyl group, a carbamoyl group, an alkylsulfonyl group, an arylsulfonyl group,

G_3 , R_{31} and R_{32} each independently represents a hydrogen atom, a halogen atom, an aliphatic group, an aromatic group, a heterocyclic group, a cyano group, a carboxyl group, a carbamoyl group, an alkoxycarbonyl group, an aryloxycarbonyl group, a heterocyclic oxycarbonyl group, an acyl group, a hydroxy group, an alkoxy group, an aryloxy group, a heterocyclic oxy group, a silyloxy group, an acyloxy group, a carbamoyloxy group, an alkoxycarbonyloxy group, an aryloxycarbonyloxy group, an amino group, an arylamino group, a heterocyclic amino group, an acylamino group, an ureido group, a sulfamoylamino group, an alkoxycarbonylamino group, an aryloxycarbonylamino group, an alkylsulfonylamino group, an arylsulfonylamino group, a heterocyclic sulfonylamino group, a nitro group, an alkylthio group, an arylthio group, an alkylsulfonyl group, an arylsulfonyl group, a heterocyclic sulfonyl group, an alkylsulfinyl group, an aryl sulfinyl group, a heterocyclic sulfinyl group, a sulfamoyl group, a sulfo group or a heterocyclic thio group, each of which may be further substituted; and

R₃₁ and R₃₅, or R₃₅ and R₃₆ may be bonded to form a 5- or 6-membered ring; and
a dye represented by formula (M2):



(M2)

wherein,

R represents a hydrogen atom, an alkyl group, a hydroxy-lower alkyl group, a cyclohexyl group, a mono or dialkylaminoalkyl group, or a cyano-lower alkyl group;

Y represents a chlorine atom; a hydroxyl group; an amino group; a mono or dialkylamino group in which the alkyl moiety may have a substituent selected from the group consisting of a sulfonic acid group, a carboxyl group and a hydroxyl group; an aralkylamino group; a cycloalkylamino group; an alkoxy group; a phenoxy group in which the benzene ring may have a substituent selected from the group consisting of a sulfonic acid group, a carboxyl group, an acetylamino group, an amino group and a hydroxyl group; an anilino group that may have one or two substituents selected from the group consisting of a sulfonic acid group and a carboxyl group; a naphthylamino group in which the naphthyl group may be substituted with a sulfonic acid group; or a mono or dialkylaminoalkylamino group;

X represents a crosslinking group; and

Z represents a hydrogen atom, an alkali metal element, an alkaline earth metal element, an alkylamino group, an alkanolamino group, or an ammonium group according to claim 12; and
~~a dye represented by formula (M2) according to claim 13.~~